



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,095	03/26/2004	Herman Lee	112056-0152U	9717
24267 7590 03/21/2007 CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			EXAMINER PEIKARI, BEHZAD	
			ART UNIT 2189	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS			MAIL DATE 03/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,095	LEE ET AL.	
	Examiner	Art Unit	
	B. James Peikari	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 17-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 17-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-8 and 17-40 in the reply filed on December 19, 2006 is acknowledged. Indeed, claims 35-40 should have been included in Group I of the restriction requirement.

Specification

2. The disclosure is objected to because of the following informalities: the status of the related applications listed on pages 3 and 17-18 of the specification should be updated as appropriate. For example on page 9, U.S. Patent Application No. 10/216,453 should be updated as ", now U.S. Patent No. 7,107,385".

Appropriate correction is required.

Claim Objections

3. The previous objections to the claims are withdrawn due to the amendment filed on September 7, 2006.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2189

5. Claims 29-34 recite the limitation "The method" in line 1 of each claim. There is insufficient antecedent basis for this limitation in claims 29-34.

Claim Rejections - 35 USC § 101.

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the scope of "a computer-readable medium" has not been limited to a hardware device. Thus, for example, the scope of the claims may include a medium such as a carrier wave, a form of energy, which is not one of the four statutory categories of invention outlined in 35 U.S.C. 101. Note MPEP 2106.

Claim Rejections - 35 USC § 102

8. The previous rejections under 35 U.S.C. 102 are withdrawn due to the amendment filed on September 7, 2006.
9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

Art Unit: 2189

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-8 and 17-40 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Takeda et al., U.S. 7,003,634 B2.

Takeda et al. teaches each of the features of the invention including proxying access commands from a first storage system (*e.g.*, *Figure 1, element 3*) to a second storage system (*e.g.*, *Figure 1, element 5a*) in a storage system cluster (*note the lower half of Figure 1*), wherein the storage systems are appliances (devices) connected by a fibre (fiber) channel interconnect (*note Figure 13, element 90*), which may directly connect (*note "create logical-device pair" in Figure 15*) a first storage appliance (*e.g.*, *Figure 15, element 3*) to a second storage appliance (*e.g.*, *Figure 15, element 5z*). The heart of the invention, "receiving a data access command at the first storage system that is directed to the second storage system; forwarding the received data access command to the second storage system via a cluster interconnect; processing the data access command at the second storage system; returning a response from the second storage system to the first storage system via the cluster interconnect; and sending a response to the data access command to a client from the first storage system", is taught throughout the Takeda et al. disclosure (*note, e.g., the Summary of the Invention in columns 1 and 2, or the explanation of Figure 5*) such that if a client wishes to access "a predetermined set of read data" (*i.e.*, a "request") from a first storage device (*i.e.*, using an address that directs the request to the first storage

Art Unit: 2189

device), or simply does not have the most up-to-date version of the requested data, the request can be serviced by creating a "virtual port" (i.e., a logical port) by giving the first storage device access to the physical port of a second storage device. The second device provides the data, which is returned to the client by the first storage device, so that the servicing of all data access requests appears indistinguishable to the client.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

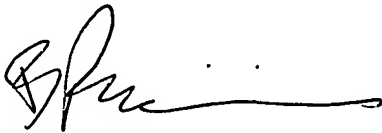
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Peikari whose telephone number is (571) 272-4185. The examiner is generally available between 7:00 am and 7:30 pm, EST, Monday through Wednesday, and between 5:30 am and 4:00 pm on Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon, can be reached at (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2189

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'B. James Peikari', with a long horizontal flourish extending to the right.

B. James Peikari
Primary Examiner
Art Unit 2189
3/19/07